Safety-net Hospitals in Brooklyn, New York: A Review

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Abstract: Safety-net hospitals (SNHs) provide health care services to individuals regardless of their ability to pay. These hospitals serve Medicaid recipients, the uninsured, and people with limited access to health care due to their socioeconomic status, race, or ethnicity. In addition to providing health care to the most vulnerable, SNHs are crucial in training the next generation of clinicians. Hospitals serving Medicaid patients and the uninsured have low operating margins because of a dated State Medicaid financial model, and as a result, many now face closure. This review provides historical context for the financial challenges facing SNHs in Brooklyn, New York. In addition, it examines how New York State's Medicaid reimbursement methodology threatens the viability of hospitals that serve low-income communities. Finally, the article suggests a solution to the health care crisis in Brooklyn, capitalizing on structural payment reform successes in other states.

Key words: Safety-net hospitals, Medicaid, social determinants, access to care.

Safety-net hospitals (SNHs) provide health care services to individuals regardless of their ability to pay.[1-3] These hospitals serve Medicaid recipients, the uninsured, and people with limited access to health care due to their socioeconomic status, race, or ethnicity. In addition to providing health care to the most vulnerable, safety-net hospitals have an essential role in health care.[1-3] They ensure all individuals have access to clinical services, including preventive care, emergency treatment, and chronic disease management.[1-3] In the United States (U.S.), SNHs receive funding from the government to support their operations and ensure that they can continue to provide services to underserved communities.[4] To help cover the cost of care for eligible patients, these hospitals may also participate in the Medicaid, Medicare, or Children's Health Insurance Programs.[4] While the government does provide health insurance to low-income patients to ensure access to essential services (e.g., Managed Medicaid in New York State), in the post COVID-19 era many hospitals that provide care to vulnerable populations face closure because reimbursement rates have not kept pace with rising health care expenses.[5] Although nationwide hospitals experienced a significant decline in operating margins, nonprofit and public hospitals experienced a more substantial decline than for-profit hospitals post pandemic.[5]

Despite financial constraints, SNHs must meet the same standards for health care quality as hospitals that serve the more affluent population with private insurance. In the period between 2010 and 2020, private insurers reimbursed hospitals nearly twice as much as Medicare [6] Although numerous studies have reported a positive relationship between Medicaid expansion and better quality, hospitals serving Medicaid beneficiaries tend to get low scores on quality, safety, and patient experience measures.[7,8] This observation may reflect the complexity

of the patient population (e.g., increased comorbid conditions and barriers to access) and the limited resources available to SNHs. For example, in New York State (NYS), Medicaid payment rates have not increased with inflation for decades.[9,10] They are at least 27% (i.e., 27%-39%) below the cost of care, depending on whether the service is inpatient, outpatient, or all services.[9,10]

This review provides historical context for the financial challenges that SNHs in Brooklyn, New York face, as seen from the standpoint of the Chairman of the Department of Medicine and an intensivist practicing at The Brooklyn Hospital Center. In addition, it examines how New York State's Medicaid reimbursement methodology threatens the viability of hospitals that serve low-income communities. Finally, the article suggests a solution to the health care crisis in Brooklyn, capitalizing on structural payment reform successes in other states. The borough of Brooklyn is perhaps the most compelling example of New York's health care safety-net challenges due to its diverse population, number of Medicaid beneficiaries, and number of hospitals at risk for consolidation or closure.

Brooklyn's Complex Demographics

The City of New York (NYC) comprises five boroughs, and each borough is a county of New York State. Kings County, the NYC borough of Brooklyn, is the most populated county in New York.[11-13] Kings County is the second-most densely populated county in the United States, behind New York County (i.e., Manhattan). If Brooklyn were a city, it would be the fourth largest in the U.S. Brooklyn’s demographics are quite diverse. In 2019, Brooklyn had approximately 2,559,903 residents, of whom 11.9% were Asian, 29.8% were Black, 18.9% were Hispanic, and 36.5% were White.[11-13] According to the New York University (NYU) Furman

Center, the median household income in Brooklyn in 2019 was $70,340, approximately 4% less than the citywide median household income ($72,930). The mean salary of a resident in Brooklyn was $33,183 in 2020. In 2019, the poverty rate in Brooklyn was 17.7% compared with the citywide rate of 16.0%.[11] Brooklyn's Medicaid enrollment grew 11.3% in 2020.[14-16] The program's growth may be related to the increase in the Federal Medical Assistance Percentage imposed before the pandemic and economic factors related to the pandemic (e.g., unemployment) that persisted into 2021.[14]

How Safety-net Hospitals Are Defined

In 2000, the Institute of Medicine defined SNHs as hospitals that, by "mission or mandate," provide care to a substantial share of vulnerable patients regardless of their ability to pay.[2] However, multiple definitions exist, and the number of Medicaid beneficiaries a hospital serves is a crucial feature of the definition.[2] In NYS, the definition states that "a hospital must be either a public hospital, Critical Access Hospital, or Sole Community Hospital, or must meet two criteria": First, at least 35% of all patient volume in the hospital's outpatient service lines must be associated with Medicaid, uninsured, and dual-eligible individuals.[17] Second, the hospital must provide at least 30% of inpatient care to Medicaid-eligible, uninsured, or dual-eligible patients.[17] Lastly, the hospital must serve at least 30% of all Medicaid, uninsured, and dual-eligible members in the proposed county or multi-county community.[17]

New York State's non-profit SNHs are primarily located in low-income neighborhoods and treat a disproportionate number of people from racial/ethnic minority groups.[1-3,18] According to government data, Kings County has 17 hospitals and approximately 10 qualify as SNHs, although the exact number may vary due to consolidations, mergers, and acquisitions.[19] However, it is essential to note that financial health inequities exist even among SNHs. Safety-

net hospitals most at risk of closure are the independent, voluntary hospitals—private, non-profit hospitals operated by individuals, partnerships, or corporations.[20] In contrast, public SNHs, may be government-owned, fully funded, and run solely off government funds.[20] For example, public SNHs, such as the Health and Hospital Corporation (HHC), receive city subsidies. In contrast, others, such as the State University of New York (SUNY) Downstate (University Hospital of Brooklyn), receive state subsidies. Financially, independent voluntary SNHs are entirely on their own.

The Medicaid Program Expansion and Its Implications for Brooklyn's SNHs

The Medicaid program has grown dramatically since President Lyndon Johnson signed it into law in 1965 as part of his Great Society initiative.[21] It covers nearly 79 million Americans, making it one of the most extensive health care programs in the country.[21-23] In 2010, the Affordable Care Act's (ACA) expansion initiative expanded Medicaid coverage to nearly all adults with incomes up to 138% of the federal poverty level ($20,120 for an individual in 2023).[21-23] In addition, it provided states with an enhanced federal matching rate (FMAP) for their expansion populations.[22,23] To date, 40 states (including the District of Columbia) have adopted the Medicaid expansion, and 11 states have not.[22,23] In 2012, the U.S. Supreme Court ruled that Medicaid expansion was optional for the states. To persuade states to expand Medicaid, lawmakers have continuously revoked Medicaid waivers or used other approaches.[22,23] The Medicaid expansion aims to serve the community by providing medical coverage for more people, but the data supporting improved clinical outcomes from expansion require further study.[24,25]

Medicaid has played an increasingly important role in meeting the health care needs of New Yorkers over the past 15 years.[14-16] The COVID-19 pandemic and federal laws prohibiting states from terminating Medicaid coverage during a public health emergency caused significant growth in the Medicaid program.[14-16] In 1998, about one in seven New Yorkers was enrolled in Medicaid.[14-16] As of November 2020, Medicaid covered 1,257,460 Brooklynites.[15] In 2021, the program included one in three New Yorkers. In January 2023, the State again increased eligibility for Medicaid.[16] The eligible income levels for individuals are now $1,677 per month (from $934 per month) and $20,121 per year, and for couples, they are $2,268 per month (from $1,367) and $27,214 per year.[16]

However, as the State Health Department expands Medicaid, it frequently closes, downsizes, or merges low-performing safety-net hospitals, reducing the region's capacity to serve its residents.[26,27] These strategies are a remnant of a Pataki-era task force on hospitals known as the Berger Commission.[26,27] In 2005, Stephen Berger, an investment banker, was selected by then-Governor George Pataki to lead the Commission on Health Care Facilities in the 21st Century, a panel tasked with identifying ways to reduce state medical spending. The Commission's policies have contributed to the loss of 20,000 hospital beds across the State over the last 20 years.[26] As reported by the Queens Daily Eagle, during the early days of the COVID-19 pandemic, "Gov Andrew Cuomo said throughout the coronavirus crisis New York had 53,470 hospital beds when the Coronavirus first began to kill New Yorkers — about half of what the state said it needed to care for residents with COVID-19 adequately."[26 [n.p.]] The result is an uneven distribution of the remaining beds, with about 2.2 beds per 1,000 people in Brooklyn, compared with 6.4 beds per 1,000 residents of Manhattan.[26] As of December 16, 2022, Brooklyn had almost three times as many COVID-19 deaths as Manhattan (9,400 vs. 3,920).[13]

The Voice of Safety-net Hospitals: The Safety Net Coalition.

The New York Safety Net Hospital Coalition, composed mainly of hospitals in the five boroughs of New York City, seeks to reform Medicaid reimbursement methods in the State.[9,28,29, 30] Coalition members include Kingsbrook Jewish Medical Center, Brookdale Hospital Medical Center, Interfaith Medical Center, Maimonides Medical Center, Jamaica Hospital Medical Center, Flushing Hospital Medical Center, St. Barnabas Hospital, St. John's Episcopal, Wyckoff Heights Medical Center, and NYC Health + Hospitals. The Coalition testified before the Senate Finance Committee, arguing that the current reimbursement model in NYS has led to a two-tiered health care system that has "exacerbated disparities."[28] Among the hospitals represented by the Coalition, Medicaid and uninsured patients account for 36% or more of their patient populations. According to the Coalition, the neighborhoods served by community safety-net hospitals are home to more than 4.7 million New Yorkers. Up to 76% of the residents are people of color, including Black and Latino residents.[9,28] Hospitalizations and death rates from COVID were significantly higher in these neighborhoods,[13] which are historically marginalized due to poverty and poor access to health care. As essential providers and anchors in marginalized communities throughout New York, SNHs face long-standing structural inequities in how they are reimbursed and supported.[28] These disparities are rooted in the need for more access to adequate capital, the failure to recognize SNHs' unique contribution to health care delivery, and the underinvestment in primary care.[28-30] In turn, this results in fewer resources for SNHs to serve their communities.

Medicaid Reimbursement Rates and Supplemental Funding to SNHs in NYS

In 1997, Medicaid managed care became mandatory for most Medicaid recipients in New York State.[31] This paradigm shift allowed states to contract with private insurance companies to provide Medicaid benefits.[31] Medicaid managed care plans provide health benefits to beneficiaries through managed care organizations (MCOs).[31-35] In addition to those that are for profit, MCOs can be non-profit organizations or owned by safety-net providers.[20, 21, 31-36] For most services provided to Medicaid patients, hospitals receive significantly less reimbursement than the costs of care.[36] For example, Medicaid payments were estimated to be 22% lower than Medicare fee-for-service rates, and Medicare payments typically do not cover health care costs.[36] As a result, hospitals that treat Medicaid patients will primarily experience negative operating margins as the patient volume increases.[28, 30, 36] The NYS Medicaid program's current reimbursement methodology partly stems from Medicaid Redesign Team (MRT) efforts to identify cost-containment measures completed in 2011 and 2020, estimated to yield savings of $2.7 billion and $2.2 billion, respectively.[32,33]

The Medicaid program's spending limitations have led to hospital closures and consolidation of services in New York State. Hospital bed reduction in low-income communities creates a barrier to health care access for individuals with high social risk factors resulting in gross inequity in health care.[26, 27] COVID-19 posed a challenge to hospital bed capacity during the early phases of the pandemic in New York. Throughout the public health crisis, low-income neighborhoods relied heavily on SNHs for health care, and they provided a lifeline for these communities.[13,34, 35]

For nearly two decades, inflation and rising medical costs have outpaced reimbursement rates for Medicaid, placing a significant financial strain on SNHs.[29-30] In contrast, a facility with a large private insurance mix can offset Medicaid's loss by charging privately-insured patients twice or three times what Medicaid pays.[37,38] Because SNHs see relatively few commercially-

insured patients, they receive lower rates than profitable health systems because they cannot negotiate higher rates with private insurers. The Kaiser Family Foundation estimates that private insurers spend 1.89 times as much on inpatient services as Medicare.[6] According to Commonwealth Fund estimates, Medicaid fee-for-service payments for physician services were below Medicare payment levels in 2019.[36] As a result, a dollar spent on health care leads to a loss for the SNH, while a dollar spent on health care is profitable for the hospitals serving the privately insured. Negative operating margins prevent SNHs from investing capital in infrastructure, recruiting essential staff, and investing in technology, often leaving doctors and nurses to make the best of limited resources. According to Michael Halter, former Chief Executive Officer (CEO) of Hahnemann University Hospital in Philadelphia, which recently closed its doors due to financial constraints, health care is a very capital-intensive industry.[39] "Equipment has a useful life of five or six years. Facilities need to be upgraded every eight or ten. Hospitals must purchase new equipment every five years to maintain the highest standard."[39 [n.p.]]

To fill Medicaid funding deficits, the Federal government mandates three types of Medicaid supplemental payments: The Disproportionate Share Hospital (DSH) Program, the Upper Payment Limit (UPL) Program, and the State-Initiated Supplemental Support Program.[40,41] These supplemental payment programs support a hospital's uncompensated care costs (i.e., charity care or bad debt) for treating Medicaid and uninsured patients.[40-41] Most supplemental funding in NYS comes from DSH and UPL as one-time payments independent of the Medicaid rate.[42] Public SNHs may access these funds through transfers between state and local governments (i.e., intergovernmental transfers). In addition, SNHs can receive funding through 1115 waiver programs, other NYS Medicaid special payment programs, and grants.[41] Although supplemental funding is necessary for SNHs, primarily to accommodate financial

losses due to the treatment of the uninsured, it is insufficient to cover costs. In addition, due to the one-time payment method (i.e., end of the fiscal year) used in these programs, hospitals have difficulties managing day-to-day operations, paying vendors on time, and repairing broken equipment.

The following example of what might happen with an uninsured patient admitted to the hospital demonstrates the importance of Medicaid supplemental funding. After services are delivered, hospital staff assesses Medicaid eligibility. An application is submitted, and Medicaid is billed and pays, on average, approximately 67% of the cost of hospital services in NYS.[28] If the patient does not qualify, the hospital offers individual financial assistance, which may result in free or discounted health services, also called charity care.[43] The discount might be allocated to charity care, or the patient could pay the remaining balance.[43] The hospital may also write off the balance as bad debt if the patient does not pay the discount.[43,44] The term "bad debt" refers to the account of a patient who has been billed for services but is unwilling or unable to pay.[43,44] Some hospitals take aggressive legal action to collect patient bills; frequently, this is cited as a barrier to health care access.[44] The sum of expenses related to bad debt and charity care is also known as uncompensated care.[43,44] Although not-for-profit hospitals may receive tax-exempt status for providing community services and charity care, the value of the tax exemption frequently does not cover their cost.[45] A study by Zare et al. found that hospitals with fewer beds, with graduate medical education programs, and serving low-income communities provide more incremental community benefits and charity care than the value of their tax exemptions.[45]

Due to the limitations of current supplemental funding methods, the government is moving toward payment mechanisms linked to specific services and beneficiaries rather than one-time payments. One such program is the Directed Payment Template (DPT).[46] Hospitals

that treat Medicaid managed care patients in NYS are now eligible for enhanced rates under the DPT. The enhanced payment is made to a third party and then to hospitals when an eligible patient is discharged. Federal approval of the enhanced DPT payment rates is required annually,[46] creating uncertainty for hospitals. In response to the COVID-19 pandemic, the State of New York also proposed the New York Health Equity Reform Act (NYHER).[47] The NYHER is an amendment to its current Medicaid 1115 waiver designed to address health disparities in communities affected by the COVID-19 pandemic. Since 1997, the 1115 Medicaid Waiver has permitted the Secretary of Health and Human Services to approve experimental, pilot, or demonstration projects to improve Medicaid.[47,48,49] Over the next five years, the NYHER's proposal seeks a $13.5-billion-dollar federal investment. There are four strategies included in the NYHER 1115 Waiver Demonstration: Health Equity-Focused System Redesign, Transitional Housing, System Redesign and Workforce, and Digital Health and Telehealth.[47]

For the last 15 years, several SNHs in Brooklyn have required extensive government resources and considerable reorganization to remain viable.[50,51] Despite NYS's noble efforts to maintain health care services in the low-income neighborhoods these hospitals serve, it has yet to provide a long-term sustainability strategy through payment reform. During his administration, Governor Andrew Cuomo allocated nearly $700 million to consolidate three hospitals, Brookdale University Hospital, Interfaith Medical Center, and Kingsbrook Jewish Medical Center.[51] In 2018, these three hospitals merged to become One Brooklyn Health. The recommendation to consolidate the three independent, stand-alone SNH hospitals stemmed from a feasibility study performed by Northwell Health, the largest health care provider in NYS.[50] The NYS Department of Health had retained Northwell Health and Northwell Ventures, Northwell's business advisory division, to provide a financial and operational analysis of five SNH hospitals in Brooklyn.[50] The analysis, "The Brooklyn Study: Reshaping the Future of

Healthcare," included: Brookdale University Hospital, Interfaith Medical Center, Kingsbrook Jewish Medical Center, Wyckoff Heights Medical Center, and University Hospital of Brooklyn (UHB).[50] Northwell's analysis revealed that in State Fiscal Year 2017, Brookdale, Interfaith, Kingsbrook, and Wyckoff required "over $300 million in direct State operating assistance to remain open."[50[p. 3]] The study also noted that the State subsidy estimates did not include the cost of supporting Brooklyn's University Hospital (U.B.).[50] Currently, Wykoff and U.B. remain independent institutions.

Located in Borough Park, a neighborhood in Brooklyn, Maimonides Medical Center has recently made headlines for its financial problems, which stem from treating a large Medicaid population.[52] As a leading academic and clinical institution, the hospital has performed pioneering research, including the first pediatric heart transplant in 1967.[53] According to a recent article, the medical center may be on the verge of insolvency after losing $145 million last year.[52] Several months ago, the hospital was criticized for its low patient-experience scores —a measurement based on patient surveys.[52] These scores, however, can be challenging to interpret due to various survey biases.[53,54] Following these reports, a protest movement called "Save Maimonides" sought to remove the hospital's management and improve its conditions. Save Maimonides criticizes the hospitals' management, namely the CEO's salary, but the hospital's financial situation is rooted in how the State finances health care for low-income patients.[52] Moreover, Maimonides's quality measures are not unique in that the Center for Medicare & Medicaid Services (CMS) star rating for independent SNHs ranges from one to two stars out of a possible five. in Brooklyn.[55] Medicaid payment reform advocates, including the Safety Net Coalition, say that without financial reform, the State is creating a two-tier health care system.

Payment Reform in NYS and the Maryland Model

Significant payment reform is necessary to maintain the viability of SNHs in Brooklyn, N.Y. An end-of-year one-time "pay-out" or supplemental funding that requires government approval on an annual basis is not a sustainable approach to overcoming the financial challenges faced by SNHs. Due to the uncertainty in revenue, hospitals must cut costs with each budget, reducing nursing staff and ancillary services, which creates barriers to providing high-quality care.

However, there are alternatives to the current financial model, and NYS might consider a population-based, prospective global payment model (GPM) for the SNHs in Brooklyn.[56-61] These models have been used successfully in other states.[58] Fundamentally, GPMs (i.e., a global budget) are capitation models[57-62] that provide a predefined revenue to hospitals annually. The payments are intended to cover health care expenses for a specific population or geographic area.[57-62] The GPM is ideal for independent SNHs serving low-income communities in Brooklyn because it recognizes social determinants' role in increasing future costs and disease burdens.[60] Population-based global budgets adjust payments to account for social risk.[61,62] Moreover, the prospective payment is mainly independent of future service volume, which gives an incentive to providers to limit unnecessary services such as preventable readmissions.[61] With the confidence of knowing the annual revenue, hospital administrators can focus on increasing efficiency and improving outcomes in their communities.[59,61,62]

The State of Maryland adopted a successful global payment model in 1971, and through a partnership with CMS, the model continues to evolve today.[56,57,61] As well as providing the blueprint for Brooklyn's health care issues, these programs could be adapted for other hospitals in the country. Initially, the Maryland model regulated the hospital's service prices.[56] As a result, all payers-private, commercial, Medicare, Medicaid, and self-pay-are charged the same rate at

the same hospital.[56] Maryland also used service-specific unit rates as the basis of payment rather than Medicare's per-case payment system.[56-61,62,63] This payment methodology is called a Global Budget Revenue (GBR).[62] Under GBR, the Health Services Cost Review Commission (HSCRC) decided each hospital's annual revenue at the beginning of a fiscal year independently of the volume of patients treated or the number of health care services delivered.[58,59,61] Capitalizing on its early success, Maryland moved to an all-payer model in 2014—a prospective global budget for hospital payment that includes a guaranteed amount of revenue for a hospital annually.[59,61] Taking advantage of the success of the all-payer model, Maryland expanded the concept once more in 2019 when it moved to a total cost of care (TCOC) model.[61] The TCOC model includes settings beyond inpatient hospital services (e.g., primary care practices) across the continuum of care in Maryland for Medicare beneficiaries.[58,61] According to government data, total Medicare spending decreased during the program's first three years.[61,63]

Nearly 20 years have passed since the Institute of Medicine reported that members of racial/ethnic minority groups receive lower-quality health services than White Americans.[64] This finding was relevant when barriers to health care access were considered.[64] The report also suggested that members of racial and ethnic minority groups were more likely to be uninsured or beneficiaries of public health insurance than White Americans.[64] Overcoming access barriers is necessary for optimal health, but more is needed. As a society, our goal is to provide all Americans with the latest innovations and transformative technologies. Only through payment reform can we close this gap in a two-tiered health system. Perhaps the Joint Commission's (TJC) latest initiative will be a step in that direction.[65] Starting July 1, 2023, TJC will set health equity as a National Patient Safety Goal for specific accredited organizations. Through a new leadership standard and six performance elements, health equity will now be on the same level as TJC's other National Patient Safety Goals.[65]

Conclusion

Safety-net hospitals serving low-income communities have low operating margins because of a State Medicaid finance methodology that reimburses less than cost, unlike any other enterprise.[28,36] Consequently, many SNHs are at risk of closure.[50,51] This is especially true of those located in Brooklyn, N.Y., with its large and diverse safety-net population. In addition to providing health care to the most vulnerable, SNHs are crucial in training the next generation of clinicians. Safety-net hospitals offer a unique educational experience to trainees that underscores the importance of the biopsychosocial approach to medicine.[66] However, not all SNHs are at equal risk for closure; public hospitals may receive city or state subsidies, whereas voluntary, independent hospitals may not.[67,68] Increasingly, the State is limiting supplemental funding even to its own State-operated SNHs.[67,68] Higher-margin hospitals that provide care primarily to privately insured consumers have surplus income that can be reinvested into the system to support infrastructure, improve staffing, and provide innovation. The current health care finance model creates a two-tier system—one for the privately insured and one for Medicaid beneficiaries. However, there are alternatives to the current system. Population-based strategies that account for social determinants and provide hospitals with a guaranteed revenue stream while allowing them to focus on quality and efficiency may be a practical consideration.

References

1. New York State Department of Health. Eligible safety net hospitals: hospital safety net analysis from the ICR. New York, NY: New York State Department of Health. Available at: https://www.health.ny.gov/health_care/medicaid/redesign/docs/safety_net_hospitals.pdf.

2. Ein Lewin M, Altman S, eds., Institute of Medicine Committee on the Changing Market, Managed Care, and the Future Viability of Safety Net Providers. America's health care safety net: intact but endangered. Washington, DC: National Academies Press, 2000.

3. Powell WR, Hansmann KJ, Carlson A, et al. Evaluating how safety-net hospitals are identified: systematic review and recommendations. Health Equity. 2022 Apr 14;6(1):298-306. https://doi.org/10.1089/heq.2021.0076
PMid:35557553 PMCid:PMC9081065

4. Medicaid.gov. Program history: Medicaid. Baltimore, MD: Centers for Medicare & Medicaid Services. Available at: https://www.medicaid.gov/about-us/program-history/index.html.

5. Rhodes JH, Santos T, Young G. The early impact of the COVID-19 pandemic on hospital finances. J Healthc Manag. 2023 Jan-Feb;68(1):38-55. https://doi.org/10.1097/JHM-D-22-00037
PMid:36602454

6. Lopez E, Neuman T, Jacobson G, et al. How much more than Medicare do private insurers pay? A review of the literature. San Francisco, CA: Kaiser Family Foundation, 2020. Available at: https://www.kff.org/medicare/issue-brief/how-much-more-than-medicare-do-private-insurers-pay-a-review-of-the-literature/.

7. Chatterjee P, Joynt KE, Orav EJ, et al. Patient experience in safety-net hospitals: implications for improving care and value-based purchasing. Arch Intern Med. 2012 Sep 10;172(16):1204-10. https://doi.org/10.1001/archinternmed.2012.3158
PMid:22801941

8. Sarkar RR, Courtney PT, Bachand K, et al. Quality of care at safety-net hospitals and the impact on pay-for-performance reimbursement. Cancer. 2020 Oct 15;126(20):4584-92. https://doi.org/10.1002/cncr.33137
PMid:32780469

9. Letter: Medicaid reimbursement rates are too low in N.Y. Buffalo, NY: The Buffalo News, 2023. Available at: https://buffalonews.com/opinion/letters/letter-medicaid-. reimbursement-rates-are-too-low-in-ny/article_c2979b18-abe3-11ed-a020-5788039e99ef.html.

10. Lewis C. Cuomo pushes cuts to safety-net hospitals after they stepped up during pandemic. New York, NY: Gothamist (website), 2021. Available at: https://gothamist.com/news/cuomo-pushes-cuts-safety-net-hospitals-after-they-stepped-during-pandemic.

11. NYU Furman Center. Neighborhood profiles: Brooklyn, NY. New York, NY: NYU Furman Center, 2023. Available at: https://furmancenter.org/neighborhoods/view/brooklyn.

12. Data Commons. Brooklyn borough, Kings County, New York. Data Commons (database). Available at: https://datacommons.org/place/geoId/3604710022?utm_medium=explore&mprop=income&popt=Person&cpv=age%2CYears15Onwards&hl=en.

13. Statistica. Number of deaths due to coronavirus (COVID-19) in New York State as of December 16, 2022, by county. Statistica (Database), 2022. Available at: https://www.statista.com/statistics/1109403/coronavirus-covid19-death-number-new-york-by-county/.

14. De Napoli T, Office of the New York State Comptroller. Medicaid: enrollment growth, COVID-19 and the future. Albany, NY: Office of the New York State Comptroller, 2021. Available at: https://www.osc.state.ny.us/files/reports/pdf/medicaid-enrollment-growth-covid-19-and-the-future.pdf.

15. Medicaid Matters New York. Medicaid matters to all New Yorkers. New York, NY: Medicaid Matters New York, 2020. Available at: https://medicaidmattersny.org/wp-content/uploads/2021/03/MMNY-2020-Pandemic-Medicaid-Enrollment-County-Report.pdf.

16. Keep Them Safe (KTS) Pooled Trust. Medicaid eligibility expansion for New Yorkers in 2023. Brooklyn, NY: KTS, 2023. Available at: https://ktstrust.org/medicaid-eligibility-expansion-for-new-yorkers-2023/.

17. New York State Department of Health. Safety net definition. New York, NY: New York State Department of Health, 2023. Available at: https://www.health.ny.gov/health_care/medicaid/redesign/dsrip/safety_net_definition.htm.

18. Eisenberg A. New York's safety-net hospitals were on the front lines of the coronavirus. Now they are facing ruin. New York, NY: POLITICO, 2020. Available at: https://www.politico.com/states/new-york/albany/story/2020/05/16/new-yorks-safety-net-hospitals-were-the-front-lines-of-the-coronavirus-now-theyre-facing-ruin-1284316.

19. New York State Department of Health. NYS Health Profiles: hospitals by region/county and service. New York, NY: New York State Department of Health, 2023. Available at: https://profiles.health.ny.gov/hospital/county_or_region/county:047.

20. Hyman HH. Are public hospitals in New York City inferior to voluntary, non-profit hospitals? A study of JCAH hospital surveys. Am J Public Health. 1986 Jan;76(1):18-22. https://doi.org/10.2105/AJPH.76.1.18
PMid:3455672 PMCid:PMC1646414

21. Moore JD, Smith DG. Legislating Medicaid: considering Medicaid and its origins. Health Care Financ Rev. 2005;27(2):45-52.

22. Kaiser Family Foundation (KFF). Focus on Health Reform. A Guide to the Supreme Court's Decision on the ACA's Medicaid Expansion. Washington, DC: KFF, 2012. Available at: https://www.kff.org/wp-content/uploads/2013/01/8347.pdf.

23. Congressional Research Service. Overview of the ACA Medicaid expansion. Washington, DC: Congressional Research Service, 2021. Available at: https://crsreports.congress.gov/product/pdf/IF/IF10399.

24. Baicker K, Taubman SL, Allen HL, et al. The Oregon experiment--effects of Medicaid on clinical outcomes. N Engl J Med. 2013;368(18)1713-22. https://doi.org/10.1056/NEJMsa1212321
PMid:23635051 PMCid:PMC3701298

25. Mazurenko O, Balio CP, Agarwal R, et al. The effects of Medicaid expansion under the ACA: a systematic review. Health Aff (Millwood). 2018 Jun;37(6):944-50. https://doi.org/10.1377/hlthaff.2017.1491
PMid:29863941

26. Brand D. Architect of NYC hospital closures says the city still has 'plenty of hospital beds' despite coronavirus crisis. Queens, NY: Queens Daily Eagle, 2020. Available at: https://queenseagle.com/all/berger-commission-closed-hospitals-interview.

27. Gardner K. Why, exactly, did we need the Berger Commission? Rochester, NY: Rochester Business Journal, 2006. Available at: https://rbj.net/2006/12/08/why-exactly-did-we-need-the-berger-commission/.

28. Testimony of New York Coalition of Essential/Safety Net Hospitals On the Governor's Proposed SFY 2023 Health and Medicaid Budget Submitted for the Joint Legislative Budget Hearing on Health. 2023. Available at: https://www.nysenate.gov/sites/default/files/new_york_coalition_of_essential_and_safety_net_hospitals_-_sfy23_joint_budget_hearing_testimony_020821.pdf.

29. Knudsen J, Chokshi DA. Covid-19 and the safety net - moving from straining to sustaining. N Engl J Med. 2021 Dec 9;385(24):2209-11. Epub 2021 Dec 4.

https://doi.org/10.1056/NEJMp2114010
PMid:34874629

30. New York Safety Net Hospital Coalition. Help make New York's healthcare system more accessible, equitable, and proactive. New York, NY: New York Safety Net Hospital Coalition, 2023. Available at: https://www.nysafetynets.org/.

31. Department of Health. Medicaid Managed Care (MMC) overview. New York, NY: New York State Department of Health, 2017. Available at: https://www.health.ny.gov/health_care/medicaid/redesign/mrt90/nhtd-tbi/mmc_overview.htm.

32. New York State Department of Health. MRT II Executive Summary of proposals. New York, NY: New York State Department of Health, 2020. Available at: https://www.nysac.org/files/MRT%20II%20Exec%20Summary%20of%20Proposals.pdf.

33. New York State Department of Health. A plan to transform the empire state's Medicaid program. New York, NY: New York State Department of Health. Available at: https://www.health.ny.gov/health_care/medicaid/redesign/docs/mrtfinalreport.pdf.

34. Kaiser Family Foundation (KFF). Status of state Medicaid expansion decisions: interactive map. Washington, DC: KFF, 2023. Available at: https://www.kff.org/medicaid/issue-brief/status-of-state-medicaid-expansion-decisions-interactive-map/.

35. Office of the New York State Comptroller. COVID-19 pandemic drove record Medicaid enrollment in 2021. New York, NY: Office of the New York State Comptroller, 2021. Available at: https://www.osc.state.ny.us/press/releases/2021/12/covid-19-pandemic-drove-record-medicaid-enrollment-2021.

36. Mann C, Striar A. How differences in Medicaid, Medicare, and commercial health insurance payment rates impact access, health equity, and cost. New York, NY: The Commonwealth Fund, 2022. Available at: https://www.commonwealthfund.org/blog/2022/how-differences-medicaid-medicare-and-commercial-health-insurance-payment-rates-impact.

37. Schwartz K, Lopez E. What we know about provider consolidation. Kaiser Family Foundation (KFF), 2020. Available at: https://www.kff.org/health-costs/issue-brief/what-we-know-about-provider-consolidation/.

38. Cutler DM. Health care in a time of deficit concern. JAMA Health Forum. 2023 Mar 3;4(3):e230930.
https://doi.org/10.1001/jamahealthforum.2023.0930
PMid:36951856

39. Pomorski C. The death of Hahnemann Hospital. New York, NY: The New Yorker, 2021. Available at: https://www.newyorker.com/magazine/2021/06/07/the-death-of-hahnemann-hospital.

40. Medicaid and CHIP Payments and Access Commission (MACPAC). Supplemental payments. Washington, DC: MACPAC, 2023. Available at: https://www.macpac.gov/subtopic/supplemental-payments/.

41. Medicaid.gov. Section 1115 demonstrations. Baltimore, MD: U.S. Centers for Medicare and Medicaid Services. Available at: https://www.medicaid.gov/medicaid/section-1115-demonstrations/index.html.

42. Orecki P. Medicaid supplemental payments: state workgroup makes limited progress on part of the problem. New York, NY: Citizens Budget Commission, 2019. Available at: https://cbcny.org/research/medicaid-supplemental-payments-0.

43. Levinson Z, Hulver S, Neuman T. Hospital charity care: how it works and why it matters. San Francisco, CA: Kaiser Family Foundation (KFF), 2022. Available at: https://www.kff.org/health-costs/issue-brief/hospital-charity-care-how-it-works-and-why-it-matters/#:~:text=The%20sum%20of%20charity%20care,is%20unlikely%20to%20collect%20payment.

44. Consumer Financial Protection Bureau (CFPB). Medical debt burden in the United States. Washington, DC: CFPB, 2022. Available at: https://files.consumerfinance.gov/f/documents/cfpb_medical-debt-burden-in-the-united-states_report_2022-03.pdf?stream=top.

45. Zare H, Eisenberg MD, Anderson G. Comparing the value of community benefit and tax-exemption in non-profit hospitals. Health Serv Res. 2022 Apr;57(2):270-84. https://doi.org/10.1111/1475-6773.13668
PMid:33966271 PMCid:PMC8928013

46. Medicaid and CHIP Payments and Access Commission (MACPAC). Directed payments in Medicaid managed care. Washington, DC: MACPAC, 2022. Available at: https://www.macpac.gov/wp-content/uploads/2022/06/June-2022-Directed-Payments-Issue-Brief-FINAL.pdf.

47. Office of Health Insurance Programs. New York State Medicaid Redesign team (MRT) waiver amendment. Albany, NY: New York State Department of Health, 2022. Available at: https://www.health.ny.gov/health_care/medicaid/redesign/med_waiver_1115/docs/2022-09-02_final_amend_request.pdf.

48. McConnell KJ, Rowland R, Nevola A. A Medicaid benefit for health-related social needs. JAMA Health Forum. 2023 Feb 3;4(2):e225407.
https://doi.org/10.1001/jamahealthforum.2022.5407
PMid:36800193

49. New York State Department of Health. New York 1115 Medicaid waiver information page. New York, NY: New York State Department of Health, 2023. Available at: https://www.health.ny.gov/health_care/medicaid/redesign/medicaid_waiver_1115.htm.

50. Northwell Health. The Brooklyn Study: reshaping the future of healthcare. New Hyde Park, NY: Northwell Health, 2016. Available at: https://www.northwell.edu/sites/northwell.edu/files/d7/20830-Brooklyn-Healthcare-Transformation-Study_0.pdf.

51. Richling B. Consolidation of three Brooklyn hospitals restarts mid-pandemic, staff, community, and advocates push back. New York, NY: Bklyner (website), 2020. Available at: https://bklyner.com/consolidation-of-three-brooklyn-hospitals-restarts-mid-pandemic-staff-community-and-advocates-push-back/.

52. Sales B. The battle over Brooklyn's Maimonides Medical Center - a guide for the perplexed. Jewish Insider (website), 2022. Available at: https://ejewishphilanthropy.com/the-battle-over-brooklyns-maimonides-medical-center-a-guide-for-the-perplexed/.

53. Kantrowitz A, Haller JD, Joos H, et al. Transplantation of the heart in an infant and an adult. Am J Cardiol. 1968 Dec;22(6):782-90.
https://doi.org/10.1016/0002-9149(68)90173-2
PMid:4880223

54. Godden E, Paseka A, Gnida J, et al. The impact of response rate on Hospital Consumer Assessment of Healthcare Providers and System (HCAHPS) dimension scores. Patient Experience Journal. 2019;6(1):105-14.
https://doi.org/10.35680/2372-0247.1357

55. Medicare.gov. Find and compare providers near you. Baltimore, MD: U.S. Centers for Medicare and Medicaid Services, 2023. Available at:

https://www.medicare.gov/care-compare/?providerType=Hospital.

56. Murray R. Setting hospital rates to control costs and boost quality: the Maryland experience. Health Aff (Millwood). 2009;28(5):1395-405.
https://doi.org/10.1377/hlthaff.28.5.1395
PMid:19738257

57. Offodile AC 2nd, Gibbons JB, Murrell S, et al. A global equity model (GEM) for the advancement of community health and health equity. NAM Perspect. 2022 Nov 14;2002:10.31478/202211b.
https://doi.org/10.31478/202211b
PMid:36713771 PMCid:PMC9875856

58. Peterson CL, Schumacher DN. How Maryland's total cost of care model has helped hospitals manage the COVID-19 stress test. Washington, DC: Health Affairs, 2020.

59. Baker Donelson. Maryland all-payer model's progression to total cost of care: alignment strategies for stakeholders in new cost paradigm. Baltimore, MD: Baker Donelson, 2018. Available at: https://www.bakerdonelson.com/maryland-all-payer-models-progression-to-total-cost-of-care-alignment-strategies-for-stakeholders-in-new-cost-paradigm.

60. McCarthy ML, Li Y, Elmi A, et al. Social determinants of health influence future health care costs in the Medicaid cohort of the District of Columbia study. Milbank Q. 2022 Sep;100(3):761-84. Epub 2022 Sep 22.
https://doi.org/10.1111/1468-0009.12582
PMid:36134645

61. Centers for Medicare & Medicaid Services. Maryland Total Cost of Care (MD TCOC) Model: evaluation of the first three model years (2019-2021). Baltimore, MD: Centers for Medicare & Medicaid Services, 2022. Available at: https://innovation.cms.gov/data-and-reports/2022/md-tcoc-qor2-aag.

62. Maryland Hospital Association. Global budget revenue FAQ. Elkridge MD: Maryland Hospital Association, 2023. Available at: https://www.mhaonline.org/docs/default-source/default-document-library/global-budget-revenue-faq.pdf?sfvrsn=5009e918_19.

63. Rotter J, Calkins K, Setwart K, et al. Evaluation of the Maryland Total Cost of Care Model: quantitative-only report for the model's first three years (2019 to 2021). Princeton, NJ: Mathematica, 2022. Available at: https://innovation.cms.gov/data-and-reports/2022/md-tcoc-qor2.

64. Smedley B, Stith A, Nelson A, eds. Unequal treatment: confronting racial and ethnic disparities in health care. Institute of Medicine Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care. Washington, DC: National Academy Press, 2003.

65. The Joint Commission. R3 report: requirement, rationale, reference. Oakbrook Terrace, IL: The Joint Commission, 2022. Available at: https://www.jointcommission.org/-/media/tjc/documents/standards/r3-reports/r3_disparities_july2022-6-20-2022.pdf.

66. Gourevitch MN, Malaspina D, Weitzman M, e al. The public hospital in American medical education. J Urban Health. 2008 Sep;85(5):779-86.
https://doi.org/10.1007/s11524-008-9297-4
PMid:18575982 PMCid:PMC2527439

67. Arbetter S. NY assemblywoman Glick wants to restore subsidy to SUNY's teaching hospitals. New York, NY: State of Politics, 2022. Available at: https://nystateofpolitics.com/state-of-politics/new-york/politics/2022/02/08/ny-assemblywoman-glick-wants-to-restore-subsidy-to-suny-s-teaching-hospitals.

68. Belmont M. SUNY's three teaching hospitals need a cash injection to stay strong. Latham, NY: New York State United Teachers, 2023. Available at: https://www.nysut.org/news/2023/march/suny-hospitals.